

26 Feb 1990

PMFAA-B

POWER METER, LIGHT WAVE

1. GENERAL. This procurement requires a portable, digital, optical power meter.

2. CLASSIFICATION. Type II, Class 3, Style EP, and Color R in accordance with MIL-T-28800 for shipboard applications.

2.1 Electromagnetic interference requirements. The requirements of MIL-T-28800 are limited to CE01, CE03, CS01, CS02 (0.05 to 100 MHz), CS06, RE01 (back panel search excluded), RE02 (14 kHz to 1 GHz), and RS03 (limited to 5V/m).

3. OPERATIONAL REQUIREMENTS. The equipment shall measure lightwave power levels in multimode fiber optic cables within the minimum ranges and accuracies specified below.

3.1 Wavelength. 1,300 nm. Accuracy: ± 30 nm.

3.2 Measurement range. +10 to -40 dBm.

3.3 Power measurement accuracy. ± 0.5 dBm.

3.4 Measurement units. dBm and mW.

3.5 Display. Digital readout. Liquid crystal displays shall be backlit.

3.6 Connector type. ST.

4. TRANSIT CASE. The Style P transit case shall provide protection for all components of the power measuring test set.

4. GENERAL REQUIREMENTS.

4.1 Power source. MIL-T-28800 nominal and dc internal power source requirements are invoked as detailed below.

4.1.1 Nominal power source. Operation at 400 Hz is not required. Maximum power consumption: 25W.

4.1.2 DC internal power source. Internal batteries and charger are required. Minimum operating time shall be 4 hours following a maximum recharge time of 16 hours.

4.2 Weight. 4.5 kg (10 lb) maximum.

4.3 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.

4.4 Accessories. ST to SMA adapter.

4.5 Calibration interval. 12 months minimum. End-of-interval confidence factor: 72%.